

Appendix - For Online Publication Only

This document includes the appendix tables and figures as well as the time preference elicitation instructions.

Appendix Tables and Figures

Table A.1: Predictors of Child Time Preferences with Quadratic Age

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Time Pref.	Time Pref.	Time Pref.	Time Pref.	All Now	All Now	All Now	All Now
Child Age (in Years)	-0.17 (0.10)	-0.20* (0.11)	-0.32 (0.27)	-0.16 (0.11)	-0.02 (0.04)	-0.02 (0.04)	0.12 (0.12)	-0.03 (0.04)
Age*Age	0.02** (0.01)	0.02*** (0.01)	0.03* (0.02)	0.02** (0.01)	-0.00 (0.00)	-0.00 (0.00)	-0.01 (0.01)	-0.00 (0.00)
Child Gender (Female=1)	0.11* (0.06)	0.11* (0.06)	0.17** (0.09)	0.13** (0.06)	-0.04 (0.03)	-0.04 (0.03)	-0.07* (0.04)	-0.04 (0.03)
Child Race - White	-0.02 (0.14)	-0.01 (0.14)	-0.04 (0.22)	-0.02 (0.14)	0.06 (0.06)	0.06 (0.06)	0.10 (0.09)	0.06 (0.06)
Child Race - Black	-0.21*** (0.07)	-0.20*** (0.07)	-0.24** (0.10)	-0.21*** (0.07)	0.11*** (0.03)	0.10*** (0.03)	0.12** (0.05)	0.11*** (0.03)
Child Race - Other	-0.31 (0.52)	-0.29 (0.54)	-0.23 (0.90)	-0.29 (0.54)	0.21 (0.21)	0.21 (0.22)	0.30 (0.33)	0.21 (0.21)
Experimental Controls	✓	✓	✓	✓	✓	✓	✓	✓
SES Controls	×	✓	✓	✓	×	✓	✓	✓
Cognitive/EF Controls	×	×	✓	×	×	×	✓	×
Risk Controls	×	×	×	✓	×	×	×	✓
R ²	0.03	0.04	0.07	0.04	0.17	0.18	0.19	0.18
Test Black=White	0.18	0.16	0.35	0.18	0.44	0.49	0.86	0.47
N	1,051	1,051	554	1,037	1,051	1,051	554	1,037

Note: This table reports OLS coefficient estimates of predictors of child time preferences. All regressions control for age at test date, age squared at test date, gender and race. Hispanic is the reference category for race. Columns 1-4 use number of times child chose “now” as the dependent variable (standardized by session). Columns 5-8 use an indicator for if the child chose all immediate options in the experimental task (all now) as the dependent variable. Experimental controls include wave year. Socioeconomic status (SES) controls include household income, mother’s educational attainment, mother’s age at child birth, child’s birthweight and whether SES is missing. Columns 3-4 and 7-8 include controls for cognitive and non-cognitive index scores assessed within a year of the preference measures, as well as an indicator for whether the score is based on MAP/NIH Toolbox assessments or WJ/PPVT. Columns 4 and 8 include a control for child risk preference, evaluated concurrently with time preference. The row Test Black=White reports the p-value of a chi-squared test of the equality of the race coefficients. Standard errors are in parentheses. All regressions are clustered at the individual level.

* p < 0.10 **p < 0.05 ***p < 0.01

Table A.2: Predictors of Child Time Preferences with Race-Age Interactions

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Time Pref.	Time Pref.	Time Pref.	Time Pref.	All Now	All Now	All Now	All Now
Child Age (in Years)	0.06** (0.03)	0.06** (0.03)	0.09 (0.08)	0.07** (0.03)	-0.02* (0.01)	-0.02* (0.01)	-0.04 (0.04)	-0.02* (0.01)
Child Gender (Female=1)	0.10* (0.06)	0.11* (0.06)	0.17* (0.09)	0.13** (0.06)	-0.04 (0.03)	-0.04 (0.03)	-0.07* (0.04)	-0.04 (0.03)
Child Race - White	-0.34 (0.33)	-0.33 (0.33)	0.43 (0.87)	-0.40 (0.34)	0.34** (0.14)	0.34** (0.14)	0.02 (0.34)	0.37*** (0.14)
Child Race - Black	-0.67*** (0.20)	-0.68*** (0.20)	-0.78** (0.32)	-0.71*** (0.20)	0.36*** (0.09)	0.35*** (0.09)	0.36** (0.14)	0.38*** (0.09)
Child Race - Other	1.30 (0.95)	1.32 (0.97)	1.82 (1.54)	1.36 (0.96)	-0.40 (0.45)	-0.36 (0.43)	-0.25 (0.54)	-0.34 (0.42)
White*Age	0.04 (0.04)	0.04 (0.04)	-0.09 (0.16)	0.05 (0.04)	-0.04*** (0.01)	-0.04*** (0.01)	0.02 (0.06)	-0.04*** (0.01)
Black*Age	0.06** (0.03)	0.07** (0.03)	0.09* (0.05)	0.07** (0.03)	-0.04*** (0.01)	-0.04*** (0.01)	-0.04* (0.02)	-0.04*** (0.01)
Other*Age	-0.30** (0.12)	-0.30** (0.12)	-0.36** (0.16)	-0.31** (0.12)	0.11 (0.07)	0.11 (0.07)	0.10 (0.07)	0.10 (0.07)
Experimental Controls	✓	✓	✓	✓	✓	✓	✓	✓
SES Controls	×	✓	✓	✓	×	✓	✓	✓
Cognitive/EF Controls	×	×	✓	×	×	×	✓	×
Risk Controls	×	×	×	✓	×	×	×	✓
R ²	0.04	0.04	0.07	0.04	0.18	0.19	0.19	0.20
Test Black=White	0.35	0.32	0.17	0.36	0.91	0.90	0.32	0.91
N	1,051	1,051	554	1,037	1,051	1,051	554	1,037

Note: This table reports OLS coefficient estimates of predictors of child time preferences. All regressions control for age at test date, gender, race and race-age interactions. Hispanic is the reference category for race. Columns 1-4 use number of times child chose “now” as the dependent variable (standardized by session). Columns 5-8 use an indicator for if the child chose all immediate options in the experimental task (all now) as the dependent variable. Experimental controls include wave year. Socioeconomic status (SES) controls include household income, mother’s educational attainment, mother’s age at child birth, child’s birthweight and whether SES is missing. Columns 3-4 and 7-8 include controls for cognitive and non-cognitive index scores assessed within a year of the preference measures, as well as an indicator for whether the score is based on MAP/NIH Toolbox assessments or WJ/PPVT. Columns 4 and 8 include a control for child risk preference, evaluated concurrently with time preference. The row Test Black=White reports the p-value of a chi-squared test of the equality of the race coefficients. Standard errors are in parentheses. All regressions are clustered at the individual level.

* p < 0.10 **p < 0.05 ***p < 0.01

Table A.3: Predictors of Child Time Preferences with Parent Controls, Mothers only

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Time Pref.	Time Pref.	Time Pref.	Time Pref.	All Now	All Now	All Now	All Now
Child Age (in Years)	0.07** (0.03)	0.07** (0.03)	0.06 (0.04)	0.08*** (0.03)	-0.04*** (0.01)	-0.04*** (0.01)	-0.04** (0.02)	-0.04*** (0.01)
Child Gender (Female=1)	0.12 (0.07)	0.12 (0.07)	0.13* (0.08)	0.14* (0.07)	-0.05* (0.03)	-0.05* (0.03)	-0.05 (0.03)	-0.06* (0.03)
Child Race - White	-0.08 (0.14)	-0.08 (0.15)	-0.07 (0.15)	-0.10 (0.15)	0.07 (0.06)	0.07 (0.06)	0.07 (0.06)	0.08 (0.06)
Child Race - Black	-0.21*** (0.08)	-0.20** (0.08)	-0.19** (0.09)	-0.22** (0.09)	0.11*** (0.04)	0.09** (0.04)	0.09** (0.04)	0.10** (0.04)
Child Race - Other	-0.25 (0.54)	-0.25 (0.56)	-0.24 (0.58)	-0.22 (0.54)	0.17 (0.22)	0.18 (0.22)	0.18 (0.23)	0.18 (0.21)
Mother's Time Pref.	0.02 (0.04)	0.02 (0.04)	0.01 (0.04)	0.02 (0.04)	-0.01 (0.02)	-0.01 (0.02)	-0.00 (0.02)	-0.01 (0.02)
Experimental Controls	✓	✓	✓	✓	✓	✓	✓	✓
SES Controls	×	✓	✓	✓	×	✓	✓	✓
Cognitive/EF Controls	×	×	✓	×	×	×	✓	×
Risk Controls	×	×	×	✓	×	×	×	✓
R ²	0.02	0.03	0.03	0.04	0.18	0.19	0.20	0.20
Test Black=White	0.35	0.41	0.44	0.45	0.54	0.80	0.79	0.81
N	766	766	737	753	766	766	737	753

Note: This table reports OLS coefficient estimates of predictors of child time preferences, restricted to the sample of families in which the mother was surveyed. All regressions control for age at test date, gender, race and mother time preferences. Hispanic is the reference category for race. Columns 1-4 use number of times child chose “now” as the dependent variable (standardized by session). Columns 5-8 use an indicator for if the child chose all immediate options in the experimental task (all now) as the dependent variable. Experimental controls include wave year and the year the mother was measured. Socioeconomic status (SES) controls include household income, mother’s educational attainment, mother’s age at child birth, child’s birthweight and whether SES is missing. Columns 3-4 and 7-8 include controls for cognitive and non-cognitive index scores assessed within a year of the preference measures, as well as an indicator for whether the score is based on MAP/NIH Toolbox assessments or WJ/PPVT. Columns 4 and 8 include a control for child risk preference, evaluated concurrently with time preference. The row Test Black=White reports the p-value of a chi-squared test of the equality of the race coefficients. Standard errors are in parentheses. All regressions are clustered at the individual level.

* p < 0.10 **p < 0.05 ***p < 0.01

Table A.4: Predictors of Parent Time Preferences

	(1)	(2)	(3)	(4)
	Time Pref	Time Pref	All Now	All Now
Parent Gender (Female=1)	0.17 (0.11)	0.19* (0.11)	-0.03 (0.03)	-0.03 (0.03)
Child Race - White	0.04 (0.15)	-0.02 (0.16)	-0.03 (0.03)	-0.02 (0.03)
Child Race - Black	-0.38*** (0.09)	-0.40*** (0.09)	0.07*** (0.02)	0.08*** (0.03)
Child Race - Other	-0.17 (0.45)	-0.36 (0.43)	-0.06*** (0.01)	-0.02 (0.03)
Constant	0.01 (0.11)	0.02 (0.15)	0.09*** (0.03)	0.09** (0.04)
Experimental Controls	✓	✓	✓	✓
SES Controls	×	✓	×	✓
R ²	0.04	0.06	0.03	0.04
Test Black=White	0.01	0.02	0.00	0.00
N	632	632	632	632

Note: All regressions control for parent gender and child's race. Hispanic is the reference category for race. Columns 1-2 use number of times parent chose "now" as the dependent variable (standardized by session). Columns 3-4 use an indicator for if the parent chose all immediate options in the experimental task (all now) as the dependent variable. Experimental controls include year of treatment, year parent was measured, a dummy for whether the CHECC children in a household have multiple reported races, and a dummy for whether the parent preference is an average of two parent observations for the same child. Socioeconomic status (SES) controls include household income, mother's educational attainment, mother's age at child birth, child's birthweight and whether SES is missing. The row Test Black=White reports the p-value of a chi-squared test of the equality of the race coefficients. Standard errors are in parentheses. All regressions are clustered at the family level.

* p < 0.10 **p < 0.05 ***p < 0.01

Table A.5: Comparing Participants/Non-Participants by Wave

	Participants 2012-2013	Non-Participants 2012-2013	p-value	Participants 2017	Non-Participants 2017	p-value
Child Age (in Years)	11.01 (0.04)	11.55 (0.15)	0.03	10.82 (0.05)	11.03 (0.12)	0.12
Child Gender (Female=1)	0.50	0.49	0.83	0.49	0.50	0.69
Child Race - Black	0.45	0.45	0.87	0.19	0.55	0.00
Child Race - White	0.10	0.11	0.72	0.04	0.13	0.00
Child Race - Other	0.01	0.01	0.93	0.00	0.01	0.21
Household Income (0-15k)	0.28	0.22	0.00	0.34	0.21	0.00
Household Income (16k-35k)	0.29	0.19	0.00	0.28	0.22	0.02
Household Income (36k-60k)	0.12	0.13	0.70	0.10	0.14	0.00
Household Income (60k+)	0.08	0.11	0.19	0.02	0.14	0.00
Mother Edu (Less than High School)	0.13	0.11	0.36	0.24	0.07	0.00
Mother Edu (High School)	0.35	0.30	0.02	0.37	0.33	0.54
Mother Edu (College)	0.30	0.25	0.02	0.14	0.33	0.00
Cog Pre-Assessment Score	0.40 (0.01)	0.41 (0.01)	0.27	0.33 (0.01)	0.43 (0.01)	0.00
Non-Cog Pre-Assessment Score	0.58 (0.01)	0.59 (0.01)	0.19	0.57 (0.01)	0.59 (0.01)	0.10
N	511	1,256		588	1,597	

Note: This table reports summary statistics for experiment participants and non-participants by wave. Standard errors are in parentheses. The p-value columns report the p-value resulting from a chi-squared test (or t-test in the case of age and cog/non-cog scores) comparing participants to non-participants in each wave. The “other race” category refers to Asian/Pacific Islander, Native American and multiracial. “Age (in Years)” reflects child age on 13 December 2018.

Table A.6: Treatment Effect Regressions by Sub-Treatment: 2012-2013 Waves

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Time Pref	Time Pref	Time Pref	Time Pref	All Now	All Now	All Now	All Now
Kinderprep	0.08 (0.15)	0.07 (0.15)	0.05 (0.18)	0.03 (0.15)	-0.04 (0.07)	-0.03 (0.07)	-0.04 (0.08)	-0.02 (0.08)
PA Cash	0.11 (0.16)	0.12 (0.17)	0.11 (0.17)	0.13 (0.17)	-0.05 (0.08)	-0.04 (0.08)	-0.06 (0.08)	-0.04 (0.08)
PA College	-0.21 (0.15)	-0.16 (0.16)	-0.08 (0.17)	-0.20 (0.15)	0.09 (0.08)	0.07 (0.09)	0.02 (0.09)	0.09 (0.09)
PK Literacy	-0.38** (0.17)	-0.36** (0.17)	-0.29 (0.19)	-0.35** (0.17)	0.15 (0.10)	0.15 (0.10)	0.11 (0.11)	0.15 (0.10)
PK Tools	0.30 (0.22)	0.30 (0.22)	0.39* (0.22)	0.27 (0.22)	-0.10 (0.10)	-0.10 (0.10)	-0.15 (0.10)	-0.08 (0.10)
CogX	0.07 (0.12)	0.11 (0.12)	0.11 (0.14)	0.11 (0.13)	-0.08 (0.06)	-0.09 (0.06)	-0.10 (0.07)	-0.09 (0.06)
Child Age (in Years)	0.04 (0.13)	0.05 (0.13)	0.13 (0.15)	0.06 (0.13)	-0.05 (0.07)	-0.07 (0.07)	-0.10 (0.08)	-0.06 (0.07)
Child Gender (Female=1)	0.07 (0.08)	0.09 (0.08)	0.09 (0.09)	0.11 (0.08)	-0.03 (0.04)	-0.04 (0.04)	-0.05 (0.05)	-0.04 (0.04)
Child Race - White	0.05 (0.15)	0.05 (0.15)	0.07 (0.17)	0.03 (0.16)	0.06 (0.07)	0.07 (0.07)	0.12 (0.08)	0.08 (0.07)
Child Race - Black	-0.21** (0.09)	-0.23** (0.09)	-0.25** (0.10)	-0.25*** (0.09)	0.13*** (0.05)	0.13*** (0.05)	0.17*** (0.05)	0.14*** (0.05)
Child Race - Other	0.31 (0.48)	0.25 (0.48)	0.23 (0.48)	0.26 (0.48)	-0.02 (0.19)	0.02 (0.18)	0.06 (0.18)	0.02 (0.18)
Experimental Controls	✓	✓	✓	✓	✓	✓	✓	✓
SES Controls	×	✓	✓	✓	×	✓	✓	✓
Pretest Cognitive/EF Controls	×	×	✓	×	×	×	✓	×
Risk Controls	×	×	×	✓	×	×	×	✓
R ²	0.05	0.06	0.08	0.06	0.06	0.07	0.11	0.08
N	551	551	475	544	551	551	475	544

Note: This table reports OLS coefficient estimates of treatment effects on child time preferences for the 2012-2013 wave samples, with treatments disaggregated into individual programs. All regressions control for age at test date, gender, race, wave year, year of treatment, age at beginning of treatment and total years in the program. Hispanic is the reference category for race. Columns 1-4 use number of times child chose “now” as the dependent variable (standardized by session). Columns 5-8 use an indicator for if the child chose all immediate options in the experimental task (all now) as the dependent variable. Experimental controls include wave year. Socioeconomic status (SES) controls include household income, mother’s educational attainment, mother’s age at child birth, child’s birthweight and whether SES is missing. Columns 3-4 and 7-8 include controls for cognitive and non-cognitive index scores assessed within a year of the preference measures, as well as an indicator for whether the score is based on MAP/NIH Toolbox assessments or WJ/PPVT. Columns 4 and 8 include a control for child risk preference, evaluated concurrently with time preference. Standard errors are in parentheses. All regressions are clustered at the individual level.

* p < 0.10 **p < 0.05 ***p < 0.01

Table A.7: Treatment Effect Regressions by Sub-Treatment: 2017 Wave

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Time Pref	Time Pref	Time Pref	Time Pref	All Now	All Now	All Now	All Now
Kinderprep	0.02 (0.15)	0.02 (0.15)	-0.04 (0.18)	0.01 (0.15)	-0.01 (0.04)	-0.01 (0.04)	0.02 (0.06)	-0.01 (0.04)
PA Cash	0.13 (0.16)	0.18 (0.16)	0.14 (0.18)	0.21 (0.16)	-0.03 (0.04)	-0.04 (0.04)	-0.04 (0.05)	-0.04 (0.04)
PA College	-0.17 (0.15)	-0.17 (0.15)	-0.19 (0.17)	-0.18 (0.15)	-0.05 (0.04)	-0.05 (0.04)	-0.05 (0.04)	-0.05 (0.04)
PK Literacy	0.11 (0.22)	0.09 (0.22)	0.19 (0.25)	0.09 (0.21)	-0.01 (0.06)	0.00 (0.06)	-0.02 (0.07)	0.00 (0.06)
PK Tools	0.31 (0.22)	0.32 (0.23)	0.37 (0.23)	0.33 (0.22)	-0.01 (0.06)	-0.01 (0.06)	-0.04 (0.06)	-0.01 (0.06)
CogX	-0.11 (0.13)	-0.10 (0.12)	-0.10 (0.14)	-0.08 (0.12)	-0.00 (0.04)	-0.00 (0.04)	-0.01 (0.05)	-0.01 (0.04)
Child Age (in Years)	0.21* (0.13)	0.19 (0.12)	0.10 (0.15)	0.18 (0.12)	-0.04 (0.04)	-0.03 (0.04)	0.01 (0.05)	-0.03 (0.04)
Child Gender (Female=1)	0.08 (0.08)	0.08 (0.08)	0.02 (0.09)	0.10 (0.08)	-0.01 (0.03)	-0.01 (0.03)	0.02 (0.03)	-0.01 (0.03)
Child Race - White	-0.16 (0.22)	-0.21 (0.22)	-0.21 (0.24)	-0.21 (0.23)	0.03 (0.07)	0.05 (0.07)	0.05 (0.07)	0.05 (0.07)
Child Race - Black	-0.05 (0.10)	-0.03 (0.10)	0.07 (0.11)	-0.01 (0.10)	0.00 (0.03)	-0.01 (0.03)	-0.04 (0.04)	-0.02 (0.03)
Child Race - Other	-0.99 (0.66)	-1.02 (0.72)	-0.93 (0.73)	-1.13 (0.78)	0.39 (0.38)	0.40 (0.38)	0.36 (0.34)	0.40 (0.39)
Experimental Controls	✓	✓	✓	✓	✓	✓	✓	✓
SES Controls	×	✓	✓	✓	×	✓	✓	✓
Pretest Cognitive/EF Controls	×	×	✓	×	×	×	✓	×
Risk Controls	×	×	×	✓	×	×	×	✓
R ²	0.05	0.07	0.09	0.09	0.03	0.05	0.06	0.05
N	588	588	499	586	588	588	499	586

Note: This table reports OLS coefficient estimates of treatment effects on child time preferences for the 2017 wave sample, with treatments disaggregated into individual programs. All regressions control for age at test date, gender, race, wave year, year of treatment, age at beginning of treatment and total years in the program. Hispanic is the reference category for race. Columns 1-4 use number of times child chose “now” as the dependent variable (standardized). Columns 5-8 use an indicator for if the child chose all immediate options in the experimental task (all now) as the dependent variable. Experimental controls include wave year. Socioeconomic status (SES) controls include household income, mother’s educational attainment, mother’s age at child birth, child’s birthweight and whether SES is missing. Columns 3-4 and 7-8 include controls for cognitive and non-cognitive index scores assessed within a year of the preference measures, as well as an indicator for whether the score is based on MAP/NIH Toolbox assessments or WJ/PPVT. Columns 4 and 8 include a control for child risk preference, evaluated concurrently with time preference. Standard errors are in parentheses. All regressions are clustered at the individual level.

* p < 0.10 **p < 0.05 ***p < 0.01

Table A.8: Treatment Effect Regressions, Inverse Probability Weights: 2012-2013 Waves

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Time Pref	Time Pref	Time Pref	Time Pref	All Now	All Now	All Now	All Now
Preschool Dummy	0.04 (0.10)	0.06 (0.10)	0.10 (0.11)	0.05 (0.10)	-0.03 (0.05)	-0.04 (0.05)	-0.06 (0.05)	-0.03 (0.05)
Parent Academy Dummy	-0.06 (0.12)	-0.02 (0.12)	0.03 (0.13)	-0.04 (0.12)	0.02 (0.06)	0.01 (0.07)	-0.03 (0.07)	0.02 (0.07)
Child Age (in Years)	0.04 (0.14)	0.05 (0.14)	0.07 (0.15)	0.06 (0.13)	-0.05 (0.07)	-0.06 (0.07)	-0.08 (0.09)	-0.06 (0.07)
Child Gender (Female=1)	0.13 (0.09)	0.14 (0.09)	0.13 (0.10)	0.16* (0.09)	-0.05 (0.04)	-0.06 (0.04)	-0.06 (0.05)	-0.06 (0.05)
Child Race - White	0.05 (0.15)	0.05 (0.16)	0.05 (0.17)	0.03 (0.16)	0.04 (0.08)	0.05 (0.08)	0.10 (0.08)	0.06 (0.08)
Child Race - Black	-0.17* (0.09)	-0.19* (0.10)	-0.24** (0.11)	-0.20** (0.10)	0.10** (0.05)	0.10** (0.05)	0.15*** (0.06)	0.11** (0.05)
Child Race - Other	0.23 (0.50)	0.17 (0.50)	0.17 (0.46)	0.17 (0.50)	-0.02 (0.20)	0.03 (0.20)	0.06 (0.19)	0.03 (0.20)
Experimental Controls	✓	✓	✓	✓	✓	✓	✓	✓
SES Controls	×	✓	✓	✓	×	✓	✓	✓
Cognitive/EF Controls	×	×	✓	×	×	×	✓	×
Risk Controls	×	×	×	✓	×	×	×	✓
R ²	0.03	0.05	0.07	0.05	0.05	0.06	0.10	0.06
Test PK=PA	0.40	0.50	0.61	0.49	0.40	0.44	0.61	0.42
N	551	551	475	544	551	551	475	544

Note: This table reports OLS coefficient estimates of Preschool and Parent Academy treatment effects on child time preferences for the 2012-2013 wave samples. Inverse probability weights on treatment, age, gender and race are included. All regressions control for age at test date, gender, race, wave year, year of treatment, age at beginning of treatment and total years in the program. Hispanic is the reference category for race. Columns 1-4 use number of times child chose "now" as the dependent variable (standardized by session). Columns 5-8 use an indicator for if the child chose all immediate options in the experimental task (all now) as the dependent variable. Experimental controls include wave year. Socioeconomic status (SES) controls include household income, mother's educational attainment, mother's age at child birth, child's birthweight and whether SES is missing. Columns 3-4 and 7-8 include controls for cognitive and non-cognitive index scores assessed within a year of the preference measures, as well as an indicator for whether the score is based on MAP/NIH Toolbox assessments or WJ/PPVT. Columns 4 and 8 include a control for child risk preference, evaluated concurrently with time preference. The row Test PK=PA reports the p-value of a chi-squared test of the equality of the preschool treatment and parent academy treatment coefficients. Standard errors are in parentheses. All regressions are clustered at the individual level.

* p < 0.10 **p < 0.05 ***p < 0.01

Table A.9: Treatment Effect Regressions, Inverse Probability Weights: 2017 Wave

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Time Pref	Time Pref	Time Pref	Time Pref	All Now	All Now	All Now	All Now
Preschool Dummy	0.01 (0.12)	0.01 (0.12)	-0.04 (0.14)	0.02 (0.12)	-0.03 (0.04)	-0.04 (0.04)	-0.02 (0.04)	-0.04 (0.04)
Parent Academy Dummy	-0.06 (0.15)	-0.05 (0.15)	-0.08 (0.17)	-0.02 (0.15)	-0.05 (0.04)	-0.05 (0.04)	-0.03 (0.05)	-0.05 (0.04)
Child Age (in Years)	0.23 (0.16)	0.23 (0.16)	0.07 (0.20)	0.25 (0.16)	-0.08 (0.05)	-0.07 (0.05)	0.00 (0.06)	-0.07 (0.05)
Child Gender (Female=1)	0.14 (0.11)	0.13 (0.11)	0.11 (0.12)	0.13 (0.10)	-0.01 (0.03)	-0.00 (0.03)	0.02 (0.03)	-0.00 (0.03)
Child Race - White	-0.17 (0.23)	-0.21 (0.24)	-0.19 (0.27)	-0.21 (0.24)	0.05 (0.07)	0.06 (0.07)	0.06 (0.08)	0.06 (0.07)
Child Race - Black	-0.07 (0.10)	-0.08 (0.11)	0.07 (0.12)	-0.06 (0.12)	0.01 (0.03)	0.01 (0.04)	-0.04 (0.03)	0.01 (0.04)
Child Race - Other	-0.97 (0.64)	-0.95 (0.67)	-0.97 (0.68)	-1.08 (0.73)	0.40 (0.36)	0.39 (0.36)	0.36 (0.30)	0.39 (0.35)
Experimental Controls	✓	✓	✓	✓	✓	✓	✓	✓
SES Controls	×	✓	✓	✓	×	✓	✓	✓
Cognitive/EF Controls	×	×	✓	×	×	×	✓	×
Risk Controls	×	×	×	✓	×	×	×	✓
R ²	0.06	0.07	0.10	0.09	0.05	0.06	0.10	0.07
Test PK=PA	0.65	0.71	0.83	0.76	0.69	0.70	0.73	0.71
N	588	588	499	586	588	588	499	586

Note: This table reports OLS coefficient estimates of Preschool and Parent Academy treatment effects on child time preferences for the 2017 wave sample. Inverse probability weights on treatment, age, gender and race are included. All regressions control for age at test date, gender, race, wave year, year of treatment, age at beginning of treatment and total years in the program. Hispanic is the reference category for race. Columns 1-4 use number of times child chose “now” as the dependent variable (standardized). Columns 5-8 use an indicator for if the child chose all immediate options in the experimental task (all now) as the dependent variable. Experimental controls include wave year. Socioeconomic status (SES) controls include household income, mother’s educational attainment, mother’s age at child birth, child’s birthweight and whether SES is missing. Columns 3-4 and 7-8 include controls for cognitive and non-cognitive index scores assessed within a year of the preference measures, as well as an indicator for whether the score is based on MAP/NIH Toolbox assessments or WJ/PPVT. Columns 4 and 8 include a control for child risk preference, evaluated concurrently with time preference. The row Test PK=PA reports the p-value of a chi-squared test of the equality of the preschool treatment and parent academy treatment coefficients. Standard errors are in parentheses. All regressions are clustered at the individual level.

* p < 0.10 **p < 0.05 ***p < 0.01

Table A.10: Predictors of Child Time Preferences using Marshmallow Paradigm

	(1)	(2)	(3)	(4)	(5)	(6)
	Wait time	Wait time	Wait time	Wait time	Wait time	Wait time
Child Age (in Years)	5.41 (5.34)	3.34 (5.40)	3.39 (5.57)	4.71 (6.19)	6.33 (6.82)	5.73 (5.48)
Child Gender (Female=1)	2.60 (8.31)	2.34 (8.28)	0.69 (8.41)	4.00 (8.86)	-13.39 (10.93)	2.37 (8.39)
Child Race - White	13.57 (13.31)	14.12 (13.20)	8.93 (13.60)	17.32 (14.33)	9.01 (18.02)	11.92 (13.40)
Child Race - Black	-8.57 (8.88)	-9.98 (9.05)	-10.67 (8.99)	-3.04 (9.88)	-26.37** (12.05)	-9.16 (8.95)
Child Race - Other	20.17 (33.41)	11.62 (38.10)	20.66 (33.93)	26.78 (33.00)	-13.38 (39.35)	19.53 (33.32)
Preschool Dummy						-1.72 (9.62)
Parent Academy Dummy						-2.22 (13.51)
Experimental Controls	✓	✓	✓	✓	✓	✓
SES Controls	×	✓	✓	✓	✓	✓
Cognitive/EF Controls	×	×	✓	×	×	×
Pretest Cognitive/EF Controls	×	×	×	✓	×	×
R ²	0.02	0.03	0.03	0.03	0.03	0.02
Test Black=White	0.10	0.07	0.14	0.14	0.06	0.12
N	880	880	880	783	531	872

Note: This table reports OLS coefficient estimates of predictors of child time preferences and Preschool and Parent Academy treatment effects on seconds waited in a marshmallow paradigm. All regressions control for age at test date, gender and race. Hispanic is the reference category for race. Experimental controls include year of treatment. SES controls include household income, mother education, mother age at child birth, child's birthweight and whether SES is missing. Column 3 includes controls for cognitive and non-cognitive index scores measured before treatment assignment. The cognitive and non-cognitive indexes are calculated as the mean of the subtests. Column 4 includes controls for cognitive and non-cognitive index scores assessed within a year of the preference measures. Column 5 includes a control for parent time preference. Column 6 includes a controls for treatment. The row Black v. White reports the p-value of a chi-squared test of the equality of the race coefficients. Standard errors are in parentheses.

* p < 0.10 **p < 0.05 ***p < 0.01

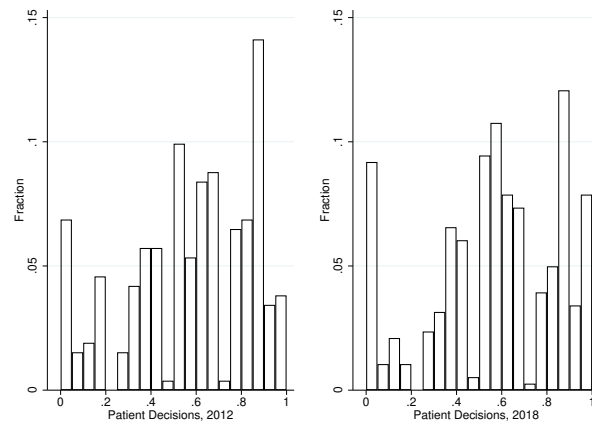
Table A.11: Consistency in Child Time Preferences by Treatment in 2012-2013 and 2017 Waves

	(1)	(2)
	Monotonic, 2012-13 wave	Monotonic, 2017 wave
Preschool Dummy	-0.04 (0.05)	-0.04 (0.05)
Parent Academy Dummy	0.01 (0.06)	-0.08 (0.06)
Child Age (in Years)	-0.06 (0.07)	-0.06 (0.06)
Child Gender (Female=1)	-0.01 (0.04)	-0.00 (0.04)
Child Race - White	0.15* (0.07)	-0.04 (0.12)
Child Race - Black	0.11* (0.05)	-0.02 (0.05)
Child Race - Other	-0.00 (0.18)	0.54*** (0.07)
Experimental Controls	✓	✓
SES Controls	✓	✓
Risk Controls	✓	✓
R ²	0.05	0.05
Test PK=PA	0.34	0.56
N	542	575

Note: This table reports OLS coefficient estimates of preschool treatment effects on a dummy for consistency in the time preference response. "Consistency" is defined as having monotonic decisions in the experimental time task. This table excludes any child observations that didn't complete the full time preference task for any reason. All regressions control for age at test date, gender, race, wave year, year of treatment, age at beginning of treatment and total years in the program. Socioeconomic status (SES) controls include household income, mother's educational attainment, mother's age at child birth, child's birthweight and whether SES is missing. Regressions also control for control for child risk preference, evaluated concurrently with time preference. The row Test PK=PA reports the p-value of a chi-squared test of the equality of the preschool treatment and parent academy treatment coefficients. Standard errors are in parentheses. All regressions are clustered at the individual level.

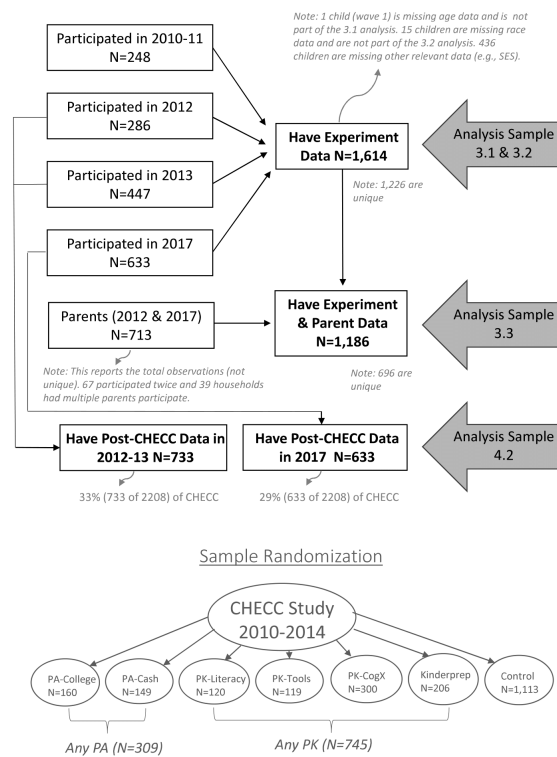
* p < 0.10 **p < 0.05 ***p < 0.01

Figure A.1: Histogram of Parent Decisions by Wave



Note: This figure shows a histogram of the proportion of patient decisions, by wave. This proportion is defined as the number of delay decisions made over total decisions in the experimental task.

Figure A.2: Flow Diagram



Note: This figure shows a flow diagram describing how the analysis sample was compiled from the child and parent waves of data collection.

Instructions

Time Preference Elicitation: Children Ages 3-5

Instructions

Now you are going to make some choices about candies. I will show you plates of candies and you will decide which plate you want. Some plates you choose, you can have TODAY, but some plates you choose you can have TOMORROW. I am going to put each plate you choose inside this box. At the end, you will CLOSE YOUR EYES and pick ONE plate from the box and that will be the plate you get to take home.

Okay, let's start!

If you pick THIS plate (point to plate with 4), you could have it at the end of school TODAY.

If you pick THIS plate (point to plate with 5), you could have it at the end of school TOMORROW.

- Quiz #1-> Can you tell me, if you pick THIS plate (point to plate with 4), when can you have it, today or tomorrow? (Yes/No, if you pick THIS plate you can have it today.)
- Quiz #2 -> Can you tell me, if you pick THIS plate (point to plate with 5), when can you have it, today or tomorrow? (Yes/No, if you pick THIS plate you can have it tomorrow)

Okay, which plate do you want, this one TODAY or this one TOMORROW?

Okay, now I will put the plate you picked in the box. Let's play again!

If you pick THIS plate (point to plate with 4), you could have it at the end of school TODAY.

If you pick THIS plate (point to plate with 6), you could have it at the end of school TOMORROW.

- Quiz #1-> Can you tell me, if you pick THIS plate (point to plate with 4), when can you have it, today or tomorrow? (Yes/No, if you pick THIS plate you can have it today.)
- Quiz #2 -> Can you tell me, if you pick THIS plate (point to plate with 6), when can you have it, today or tomorrow? (Yes/No, if you pick THIS plate you can have it tomorrow)

Okay, which plate do you want, this one TODAY or this one TOMORROW?

If you pick THIS plate (point to plate with 4), you could have it at the end of school TODAY.

If you pick THIS plate (point to plate with 7), you could have it at the end of school TOMORROW.

- Quiz #1-> Can you tell me, if you pick THIS plate (point to plate with 4), when can you have it, today or tomorrow? (Yes/No, if you pick THIS plate you can have it today.)
- Quiz #2 -> Can you tell me, if you pick THIS plate (point to plate with 7), when can you have it, today or tomorrow? (Yes/No, if you pick THIS plate you can have it tomorrow)

Okay, which plate do you want, this one TODAY or this one TOMORROW?

Okay, now I will put the plate you picked in the box. Let's play again!

If you pick THIS plate (point to plate with 4), you could have it at the end of school TODAY.

If you pick THIS plate (point to plate with 8), you could have it at the end of school TOMORROW.

- Quiz #1-> Can you tell me, if you pick THIS plate (point to plate with 4), when can you have it, today or tomorrow? (Yes/No, if you pick THIS plate you can have it today.)
- Quiz #2 -> Can you tell me, if you pick THIS plate (point to plate with 8), when can you have it, today or tomorrow? (Yes/No, if you pick THIS plate you can have it tomorrow)

Okay, which plate do you want, this one TODAY or this one TOMORROW?

Okay, now I will put the plate you picked in the box.

Okay, now you get to pick which plate you want from the box, go ahead and close your eyes, and get one.

Great, this is the plate you will get to have (TODAY/TOMORROW). I will put it in your (TODAY/TOMORROW) bag.

Thank you for playing! Good job.

Time Preference Elicitation: Children Ages 6-12

CANDY ACTIVITY

Now we'll make some choices about candy. There is no right or wrong answer in this game, we just want you to put down what you would actually choose.

There are going to be 4 rounds.

You will decide which plate of candy you want. Some of the plates, you can have TODAY, but some of the plates, you can have TOMORROW. If you get a plate for TODAY, you can take it home today after the games are done. If you get a plate for TOMORROW, we will give the plate to your parent with instructions that you can't have it until tomorrow.

At the end of the 4 rounds, only one of the rounds will be the round-that-counts and you will get to take that choice home. At the end, we are going to pick a ball out of this jar that determines which of the 4 rounds will be the round-that-counts. Since you don't know which round will count, you should make your decision in each game as if it is the round that counts.

Here are the candies that we will use (hold up candies).

Here is an example of how to circle your choices.

Veronica is deciding what to do in Round 1. She is choosing between. 1 Candy TODAY, and 2 Candies TOMORROW. She decides to get 1 Candy TODAY. She circles her answer like:

ROUND 1

FOR TODAY

1 Candy



FOR TOMORROW

2 Candies



Now Veronica decides what to do in Round 2. She decides between 1 candy today and 3 candies tomorrow. She chooses 3 candies tomorrow. She circles her answer like:

ROUND 2

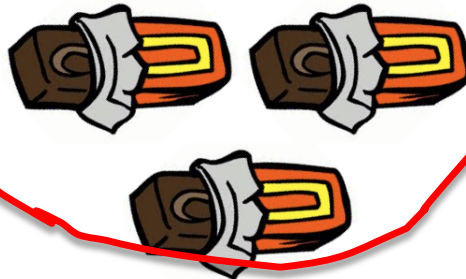
FOR TODAY

1 Candy



FOR TOMORROW

3 Candies



Now I'm going to pass around your activity sheet – for each round, go ahead and circle which candy plate you want.
We'll pick the round that counts at the end.

Time Preference Elicitation: Parents

ACTIVITY 1 EARLIER AND LATER ACTIVITY

For this activity, you will receive some payments in the form of a **debit gift card**. The gift card can be used at any store Visa, Mastercard, or Discover are accepted. Does anyone have questions about how to use the debit gift card?

We will pass around your debit gift cards now – each person gets one. Please hold on to the cards. The gift cards have \$0 loaded on them now, but you will present these to the front desk at the end of the activity and the staff will record when and what amount to load on your card. The amount and time depends on the choices you make.

DECISION CARD DECK

In this activity, you will make 16 choices about when you want to get money deposited on your card, one time is “earlier” and one time is “later.” Both the earlier and later times can be different for different decisions. This means you could receive payments as early as today, as late as 10 weeks from now, or possibly other dates in between. The gift card will be ready to use immediately after it is loaded.

You will receive a decision card deck with 16 decision cards. In each decision card, you will make a choice between an amount deposited on your gift card **earlier** or an amount deposited on your gift card **later**.

Please select the option you prefer, not what you think anyone might want you to prefer. Please only select one choice per card by checking the box. After you are done, put the finished card face down and begin on the next card. You can’t go back to previous choices so think carefully about each choice. Note that the amounts and the “Now” and “Later” times may change with each new card, so pay close attention to them.

CHOICE-THAT-COUNTS

Only one of your cards will be the **choice-that-counts**. When we are finished **with all activities**, you will bring all of your decision cards and your gift card up to the Research Assistant. The Research Assistant will shuffle up your cards and present them to you face down like this (demonstrate). You will then pick one of the cards from the deck, and this will be the one that is paid out. Since all decisions are equally likely to be chosen, you should make each decision as if it will be the decision you will actually receive; in other words, choose the outcome you really want.

PAYMENTS

The “earlier” and “later” payment will be in the form of deposits into your debit gift card. If you choose to receive money today, your deposit will be made within 2 hours. If you choose to receive money at a future date, we will be depositing the money on the day specified by 12 noon. We will give you a call as soon as your card is loaded.

As a reminder to you, you will receive a “receipt” that lets you know the days and times your deposits are scheduled to arrive. If you don’t get a payment on the date on your receipt, or you lose your card, please contact us right away and we will assist you. If you need this method explained again please raise your hand.

PRACTICE ROUND WITH CANDY

First we will do a practice round with candy. The “Now” time will be right away, and the “Later” time will be at the end of the activity session, this is about 1 hour from now. If you get a candy “Now,” you can go ahead and eat it. You will make 3 choices.

After you are done with each choice, place the cards face down and a Research Assistant will come by to have you draw out one card, that will be the **choice-that-counts** from your set. If you selected candy “Now” on that card, you will pick out the candy from this basket. If you selected candy “Later” on that card, you will present your card to the desk in front and pick up the candy on your way out.

PROCEED TO ACTIVITY

We are going to pass out your decision card deck now. Different from the candy round, you will get to find out which choice is the “choice that counts” at the very end of all the activities.

Please pick either
Option A or Option B.

☐ OPTION A - EARLIER
"I'd rather get \$20
today."



☐ OPTION B - LATER
"I'd rather get \$20
5 weeks from
today."



Decision 1



Please pick either
Option A or Option B.

☐ OPTION A - EARLIER
"I'd rather get \$19
today."



☐ OPTION B - LATER
"I'd rather get \$20
5 weeks from
today."



Decision 2



Please pick either
Option A or Option B.

☐ OPTION A - EARLIER
"I'd rather get \$18
today."



☐ OPTION B - LATER
"I'd rather get \$20
5 weeks from
today."



Decision 3



Please pick either
Option A or Option B.

☐ OPTION A - EARLIER
"I'd rather get \$16
today."



☐ OPTION B - LATER
"I'd rather get \$20
5 weeks from
today."



Decision 4



Please pick either
Option A or Option B.

☐ OPTION A - EARLIER
"I'd rather get \$14
today."



☐ OPTION B - LATER
"I'd rather get \$20
5 weeks from
today."



Decision 5



Please pick either
Option A or Option B.

☐ OPTION A - EARLIER
"I'd rather get \$12
today."



☐ OPTION B - LATER
"I'd rather get \$20
5 weeks from
today."



Decision 6



Please pick either
Option A or Option B.

☐ OPTION A - EARLIER
"I'd rather get \$10
today."



☐ OPTION B - LATER
"I'd rather get \$20
5 weeks from
today."



Decision 7



Please pick either
Option A or Option B.

☐ OPTION A - EARLIER
"I'd rather get \$6
today."



☐ OPTION B - LATER
"I'd rather get \$20
5 weeks from
today."



Decision 8



Please pick either
Option A or Option B.

☐ OPTION A - EARLIER

"I'd rather get \$20
5 weeks from
today."



☐ OPTION B - LATER

"I'd rather get \$20
10 weeks from
today."



Decision 9



Please pick either
Option A or Option B.

☐ OPTION A - EARLIER

"I'd rather get \$19
5 weeks from
today."



☐ OPTION B - LATER

"I'd rather get \$20
10 weeks from
today."



Decision 10



Please pick either
Option A or Option B.

☐ OPTION A - EARLIER

"I'd rather get \$18
5 weeks from
today."



☐ OPTION B - LATER

"I'd rather get \$20
10 weeks from
today."



Decision 11



Please pick either
Option A or Option B.

☐ OPTION A - EARLIER

"I'd rather get \$16
5 weeks from
today."



☐ OPTION B - LATER

"I'd rather get \$20
10 weeks from
today."



Decision 12



Please pick either
Option A or Option B.

☐ OPTION A - EARLIER

"I'd rather get \$14
5 weeks from
today."



☐ OPTION B - LATER

"I'd rather get \$20
10 weeks from
today."



Decision 13



Please pick either
Option A or Option B.

☐ OPTION A - EARLIER

"I'd rather get \$12
5 weeks from
today."



☐ OPTION B - LATER

"I'd rather get \$20
10 weeks from
today."



Decision 14



Please pick either
Option A or Option B.

☐ OPTION A - EARLIER

"I'd rather get \$10
5 weeks from
today."



☐ OPTION B - LATER

"I'd rather get \$20
10 weeks from
today."



Decision 15



Please pick either
Option A or Option B.

☐ OPTION A - EARLIER

"I'd rather get \$6
5 weeks from
today."



☐ OPTION B - LATER

"I'd rather get \$20
10 weeks from
today."



Decision 16

